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ABSTRACT

Several intermediate performance objectives and corresponding criterion measures are listed for each of 15 terminal objectives for a high school basic cabinetmaking course. The materials were developed for a two-semester (2 hours daily) course designed to develop and implement a well-grounded knowledge of the fundamentals of all phases of planning and operating a commercial cabinet or mill workshop. The students receive instruction, information, and practical experience in safety, mathematics, shop drawings, tools, and equipment and shop procedures. It is noted that students participating should be physically fit and have a basic knowledge of basic mathematics and reading in order to complete the course successfully. Titles of the 15 terminal objectives sections are Orientation, Related Occupations, Safety, Student Organizations, Measuring Devices and Measuring, Working Drawings, Types and Grades of Woods, Types of Fasteners, Building Hardware, General Supplies, Hand Tools, Power Tools, Wood Joints, Finishing, and Cabinet Project. (This manual and 54 others were developed for various secondary level vocational courses using the System Approach for Education (SAFE) guidelines.) (HD)

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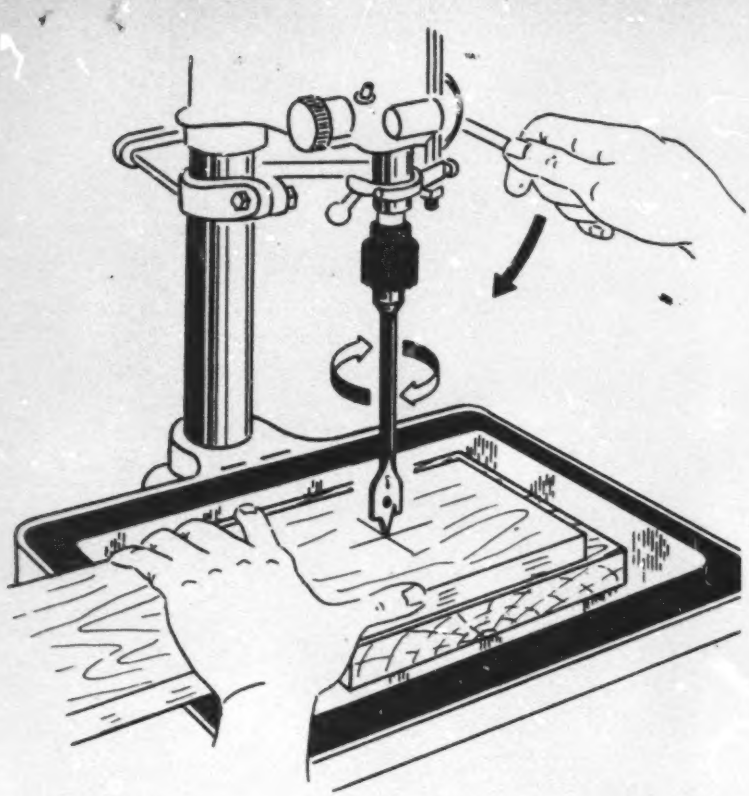
CABINETMAKING



PERFORMANCE OBJECTIVES

BASIC COURSE

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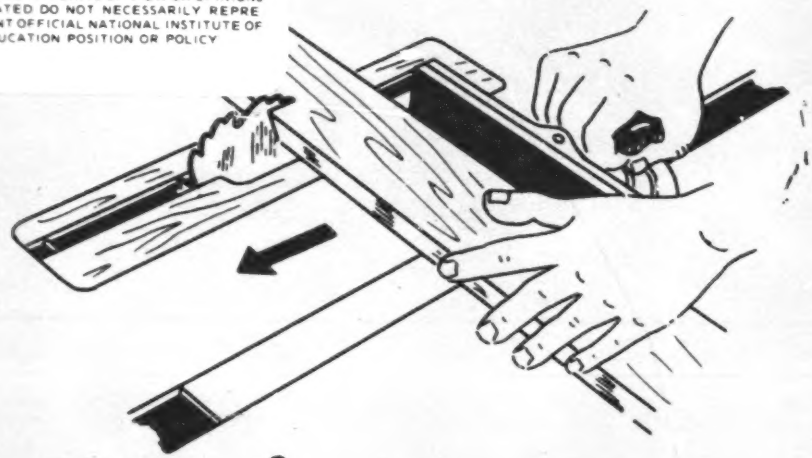

2

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June, 1975

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CABINETMAKING-BASIC
Accredition No.: 9153
Length of Course: 2 Semesters
Time Block: 2 Hours

COURSE DESCRIPTION

This basic course is to design, develop and implement a well grounded knowledge at the fundamentals of all phases at planning and operating a commercial cabinet or mill work shop. The students receive instruction, information and practical experience in safety, mathematics, shop drawings, tools, equipment and shop procedures. Students participating should be physically fit and have a basic knowledge of basic mathematics and reading in order to complete the course with any predictable degree of success.

SYLLABUS OF TERMINAL PERFORMANCE OBJECTIVES

BASIC-9153

INDEX

0.0 Curriculum Objective

1.0 Orientation

2.0 Related Occupations

3.0 Safety

4.0 Student Organizations

5.0 Measuring devices and measuring

6.0 Working Drawings

7.0 Types and Grades of Woods

8.0 Types of Fasteners

9.0 Building Hardware

10.0 General Supplies

11.0 Hand Tools

12.0 Power Tools

13.0 Wood Joints

14.0 Finishing

15.0 Cabinet Project

0.0 CURRICULUM OBJECTIVE

9153

To design, develop, field test and validate a basic course in cabinet making, furniture making and millwork for high school students by August 1976 the attainment of this bojective will be evidenced by 90% of the participants achieving 75% or above, on all of the terminal objectives contained in this curriculum guide.

This course will be field tested throughout the current year and any necessary revisions made for ensuing years as applicable.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 1.0 — Orientation

The student will answer questions or demonstrate school and shop rules and regulations governing the conduct expected during class period. This will also include grading procedures and the personal items required in class each day. This knowledge will be evidenced by a grade of 75% or better on a written or oral test.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		1.0	Test attached.
1.1	The student will state in writing 5 school and shop rules and regulations concerning personal conduct.	1.1	Write five (5) rules and 10 regulations on conduct required by the school.
1.2	The student will write a paragraph, correctly stating the grading method of the school.	1.2	Write a paragraph on grading procedure of this school.
1.3	The student will name four personal items required in class each day with 100% efficiency.	1.3	List four (4) personal items required in class each day.

1.0 C. M.

1. List five (5) school rules regarding personal conduct.
2. List three (3) shop rules regarding personal conduct.
3. List three (3) shop rules regarding dress code.
4. Give example of grading method.
5. List four (4) personal items required in class each day.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 2.0

Trade Related Occupations

The student will display his knowledge of occupations related to the cabinetmaking trade and how they relate by achieving a score of 80% or better on each of the I.P.O. criterion measure.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
2.1	The student will list five (5) occupations that are related to cabinetmaking with 100% accuracy.	2.1	List five (5) occupations related to cabinetmaking. 1. 2. 3. 4. 5.
2.2	Given an occupation listed in I.P.O. 2.1 the student will list 3 requirements for employment as a beginning worker.	2.2	List 3 requirements for a beginning worker in the designated related occupation.
2.3	Given a list of 3 cabinetmaking related jobs, the student will list the beginning pay scale of each with a tolerance of 10%.	2.3	List the beginning pay scale in the 3 related jobs designated.
2.4	The student will list three related academic subjects an explain their relation to this occupation.	2.4	List three trade related academic subjects and explain the relation of each to cabinetmaking.
2.5	Given a list of related occupations the student will select and explain the one he is most interested in.	2.5	Name the related occupation that interests you and explain the reason why a. Pattern maker d. Cabinetmaker b. Boatbuilder e. Furnituremaker c. Millworker f. Fixturemaker

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 3.0 Safety

The student will demonstrate a basic knowledge of shop safety and general safety practices by achieving 80% or better on a criterion referenced safety examination.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		3.0	Test attached.
3.1	The student will draw a diagram of the shop showing every exit routes with no error.	3.1	Draw a diagram of the shop showing emergency exit routes.
3.2	Given the diagram in I.P.O. 3.1 show the location of the fire extingusher with 100% accuracy.	3.2	Show location of fire extinguisher on diagram.
3.3	The student will explain the purpose of the yellow lines around power equipment.	3.3	Explain in writing the purpose of yellow lines around power machinery.
3.4	The student will list one safety rule for: 1. Handling heavy equipment 2. Handling long materials	3.4	Write one safety rule for each: 1. Handling heavy equipment 2. Handling long materials
3.5	The learner will list four safety precautions about the handling and use of finishing materials.	3.5	Write at least four safety precautions for the handling and use of finishing materials.

CABINET MAKING SAFETY EXAMINATION

EXAMINATION FOR TPO # 3.0

True/False

1. When changing the blade on a portable power saw, be sure the power cord is not connected to electrical source.
2. In case of fire--open all doors & windows immediately.
3. Defective electric equipment should be repaired immediately.
4. The ship floor should be clear of loose lumber and other materials at all times.
5. People should never work with electrical equipment when floor is wet.
6. Exits & fire doors should not be blocked.
7. It is permissible to use a slightly dull saw blade on power equipment.
8. When lifting a heavy weight be sure you have a sure footing and a good hand hold.
9. Student should never play around while using power equipment.
10. It is permissible to wear loose clothing while working around power equipment.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 4.0

Student Organization

The student will identify the primary Vocational-Industrial student organization and with an accuracy of 75% or better, name the personal benefits derived from this organization. Successful completion of this objective will be evidenced by completion of each of the I.P.O. criterion measures at its rated percentage.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
4.1	The student will list five (5) benefits derived from belonging to the VICA Club. 1. _____ 2. _____ 3 _____ 4. _____ 5. _____	4.1	List five benefits that can be derived from VICA. 1. _____ 2. _____ 3. _____ 4. _____ 5. _____
4.2	The student will list the entering criteria and the phases of competition sponsored each year by VICA without error.	4.2	List the phases of completion and a criteria for entering each phase. 1. 4. 2. 5. 3.
4.3	The student will list at least 2 projects which can be sponsored by a local VICA organization.	4.3	List 2 projects that may be sponsored by the local VICA organization.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 5.0 — Measuring Devices and Measuring

The student will identify, by name, eight (8) measuring devices common to this trade with 100% accuracy and will demonstrate the primary function of each device by physically measuring given objects within 1/16 inch tolerance.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		5.0	Test attached.
5.1	With 100% accuracy the student will name eight hand measuring devices used in the cabinetmaking trade.	5.1	Name eight hand measuring devices used in your trade.
5.2	Using the measuring tape and given an object the student will give measurements in writing within 1/16" tolerance.	5.2	Measure given object and record measurements.
5.3	After a lecture and demonstration the student will with 100% accuracy demonstrate the care of hand measuring tools.	5.3	Demonstrate the care of assigned hand measuring tools.
5.4	Given a lecture on the various and proper uses of the framing square the student will demonstrate these uses properly with 100% accuracy.	5.4	Demonstrate the use of the framing swuare.

5.0 C.M.

Identify the eight measuring tools issued you by correct name and demonstrate the use of each device by measuring the objects assigned you within 1/16" tolerance.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 6.0 — Working Drawings

The student will make a working drawing of a given cabinet, showing inside and outside measurements, joints to be used and will make a bill of material including each piece in the cabinet.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		6.0	Make a working drawing showing all measurements, the material to be used, the measurement of each piece of material and the joints to be made of the cabinet assigned to you.
6.1	Given a designated cabinet, the student will demonstrate his ability to make a scale drawing with a tolerance of 1/16 inch.	6.1	Make a scale drawing of a given cabinet.
6.2	Using drawing in I.P.O. 6.1 the student will make a merterial list with the measurement of each piece within a tolerance of 1/16".	6.2	Make a meterial list of the cabinet drawing showing size of each piece.
6.3	Using drawing in I.P.O. 6.1, the student will show with 100% efficiency all joints to be used with a detail drawing of each.	6.3	Show drawing of joints to be used in cabinet drawing.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 7.0 — Kinds of grades of Wood

The student will demonstrate his knowledge of kinds and grades of given woods and wood by-products applicable to cabinet making trade, with 75% or better proficiency in oral and written tests.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		7.0	Test Attached.
7.1	The student will list by correct name, ten (10) kinds of woods with 100% proficiency.	7.1	List ten (10) kinds of woods by thier correct name.
7.2	Given ten (10) blocks of wood, the student will visually identify eight of the 10 correctly.	7.2	Visually identify ten (10) kinds of given blocks of wood.
7.3	After Lecture and being shown open grain and close grain woods, the student will be able to name and identify two (2) of each.	7.3	From the wood given you, identify and name 2 open grain and 2 closed grain.
7.4	After lecture and being shown 5 grades of woods the student will be able to name and identify three (3) of these.	7.4	Name and identify three (3) grades of given lumber.
7.5	With 100% efficiency correctly grade three (3) kinds of plywood.	7.5	Grade three (3) samples of plywood.
7.6	With 100% proficiency name four (4) wood by-products.	7.6	Name 4 plywood by-products.

7.0 C.M.

1. List ten (10) kinds of woods commonly used in a cabinet shop.
2. List three (3) shft woods used in a cabinet shop.
3. List two (2) open grained hardwoods.
4. Draw picture of a piece of wood showing which way it would be headed into a machine in so far as the grain is concerned.
5. List three (3) wood by products.
6. Name three (3) grades of lumber.
7. Name three (3) grades of plywood.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 8.0

Types of Fasteners

The student will demonstrate his knowledge of fasteners both by sight and/or measurement and will state the methods for inserting each. The results will be measured by a teacher made test that will result in a grade of 75% or better.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		8.0	Test attached.
8.1	The student will demonstrate his knowledge of fasteners by identifying ten (10) from display board.	8.1	Identify ten (10) Fasterers from display board.
8.2	Of the fasteners listed in I.P.O. 8.1, the student will list, with 100% accuracy, the instrument for inserting each.	8.2	State the instrument required to insert each fastener listed.
8.3	Of the fasteners listed in I.P.O. 8.1 the student will list with 100% accuracy, which would normally be counter sunk.	8.3	List which fasteners should be counter sunk.

8.0 C.M.

1. List four (4) kinds of nails.
2. List two (2) kinds of fasteners other than nails.
3. What is the hand tool most commonly used to put in any fastener.
4. What size hammer is commonly used in a cabinet shop.
5. Name the tool used to sink nails in wood.
6. What is the name of a power tool used in some shops for fastening materials.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 9.0 — Building hardware

The student will select and identify (10) ten pieces of hardware commonly used in the cabinet leads and describe the function of each with 80% accuracy.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		9.0	Test Attached.
9.1	Given a box of assorted hardware, the student will correctly identify eight (8) items of cabinet hardware.	9.1	Identify eight (8) items of cabinet hardware.
9.2	Given five (5) items of cabinet hardware the student will demonstrate the use of each with 100% accuracy.	9.2	Demonstrate the use of five (5) items of cabinet hardware.
9.3	After licture and observation, the student will be able to identify four (4) finishes on cabinet hardware.	9.3	Identify four (4) finishes used on cabinet hardware.

9.0

Select and identify ten (10) different pieces of hardware used in the cabinet making trade and describe the function of each of them.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 10.0

General Shop Supplies

The student will demonstrate his knowledge of expendable shop supplies by stating 15 of these, will define the term "Expendable supplies" will make out a pertetual inventory card and will demonstrate the use of 10 given expendable supplies all with 75% accuracy.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		10.0	Test Attached.
10.1	The student will, with 100% accuracy, identify fifteen (15) items of expendable shop supplies.	10.1	Identify fifteen (15) items of expendable supplies.
10.2	The student will, in his own words define expendable supplies.	10.2	Define expendable supplies.
10.3	After lecture and displayed samples, the student will with 100% proficiency set up and demonstrate the use of perpetual inventory cards.	10.3	Set up and demonstrate the use of perpetual Inventory cards.
10.4	Given fifteen (15) expendable items, the student will demonstrate the use of(10) ten.	10.4	Demonstrate the use of ten (10) given expendables items.

1. Name fifteen (15) items that would be considered expendable shop supplies.
2. Draw picture of perpetral inventory card.
3. Show entry's on perpetual inventory card shown.
4. Define the term "experdable supplies".
5. Demonstrate the use of the 10 expendable supplies issued to you.

COURSE Cabinet making

TERMINAL PERFORMANCE OBJECTIVE NO. 11.0 Hand Tools

The learner will identify, sharpen, and demonstrate the use of given basic cabinetmaking hand tools. Upon completion of this objective will be evidenced by completion of each of the I.P.O. criterion measures at 100% accuracy.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
11.1	Given a block plane, the student will demonstrate how to disassemble, assemble, and adjust the plane with 100% accuracy	11.1	Assigned Block plane Disassemble, Assemble and adjust for use.
11.2	Given a block plane and a piece of stock, the learner will demonstrate the use of this plane to plane end grain and edge grain at 100% accuracy.	11.2	With the block plane assigned you demonstrate end grain and edge grain planeing.
11.3	Given a smooth or a jack plane the learner will demonstrate how to disassemble, reassemble, and adjust the plane with 100% accuracy.	11.3	Disassemble and Assemble smooth plane or jack plane.
11.4	Given a smooth or jack plane and a piece of wood stock, the learner will demonstrate correct use of the plane to plane edge grain.	11.4	Demonstrate correct use of smooth or jack plane to plane edge grain.
11.5	Given a block plane iron and a smooth or jack plane iron, the learner will sharpen them with 100% accuracy according to the following standards:	11.5	Sharpen correctly and accurately a. Block plane-Iron b. Smooth plane-Iron Keep edge straight, square, make the correct bevel on each.

COURSE Cabinet making

TERMINAL PERFORMANCE OBJECTIVE NO. 11.0 (cont'd) Hand Tools

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
11.5	a. Straight b. Square c. Correct bevel d. Whetted		
11.6	Given the following drilling and boring tools, the learner will correctly identify them by name, and will demonstrate the correct use of each: a. Hand drill b. Bit Brace c. Argor bit d. Twist Drill e. Counter sink	11.6	Select and demonstrate the following tools: a. Hand Drill b. Bit Brace c. Argor Bit d. Twist Drill Bit e. Counter Sink
11.7	Given a wood chisel and the necessary wood stock the learner will demonstrate the following operations with 100% accuracy observing all safety rules: a. Paring a Mortise b. Trimming a Tenon c. Cut a grain for a given hinge.	11.7	Demonstrate the use of a wood chisel by doing the Following: a. Paring a Mortise b. Trimming a Tenon c. Cut a grain for a hinge.
11.8	Given a wood chisel and the necessary sharpening tools, the learner will sharpen the chisel with 100% accuracy, observing the safety rules according to the following standards: a. Straight b. Square c. Correct Bevel d. Whetted	11.8	Sharpen a wood chisel correctly and accurately.

COURSE Cabinet making

TERMINAL PERFORMANCE OBJECTIVE NO. 11.0 (cont'd) Hand tools

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
11.9	The learner will state the correct type of face to have on a claw hammer and will demonstrate how to preserve this face.	11.9	State the type of face desirable and demonstrate how to put this correct face on a claw hammer.
11.10	Given a claw hammer, nail set, nails and stock, the learner will demonstrate the correct use of the hammer and nail set including: a. Grip b. Angle of Nail c. Set of nail	11.10	Demonstrate the use of the claw hammer and nail set.
11.11	Given the following types of screwdrivers, the learner will identify each by name and will correctly demonstrate the use of each: a. Slotted b. Phillips c. Scru-lox	11.11	Identify three (3) types of screwdrivers and demonstrate the correct use of each.
11.12	Given a combination plier and an end cutting (nipper) plier, the learner will identify each, and demonstrate the correct use of each.	11.12	Select and demonstrate the use of the following pliers: a. End Cutting (Nipper) b. Combination
11.13	Given a box and wrench and a combination wrench the learner will identify each and demonstrate the use of each.	11.13	Select and demonstrate the use of the following: a. Combination wrench b. Box end Wrench

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 12.0 — Power tools

The learner will identify, set-up, demonstrate the safe and correct use of given power tools with 100% accuracy. Completion of this objective will be evidenced by 100% completion of each I.P.O. criterion measure.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
12.1	Given a pedestal grinder the student will demonstrate the correct use including the following: a. Adjust tool post. b. dress wheel c. Prevent losing temper. d. Observe all safety rules.	12.1	Sharpen a Chisel on the pedestal grinder using the correct procedure.
12.2	Given a table saw with a tilting arbor, the learner will demonstrate the following at 100%: a. Names of major parts. b. Adjustments of major parts. c. Set-up to rip 2" d. Set-up to cut 45° miter. e. Set-up to cut 45° bevel.	12.2	Complete the following regarding a tilting arbor table saw. a. Name the major parts b. Demonstrate the adjustment of the major parts. c. Set-up to rip a piece of wood 2" wide. d. Set-Up to cut 45° miters. e. Set-up to cut 45° bevel.
12.3	Given a table saw and stock, the learner will rip a piece to 1-3/4" width and cut off 21-1/2" long observing safety rules.	12.3	Set up table saw and rip a piece of wood 1-3/4: wide and cut off square to 21-1/2" long.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 12.0 (cont'd) Power Tools

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
12.4	Given a jointer, the learner will demonstrate the following with 100% accuracy: a. Names of major parts. b. Functions of major parts.	12.4	Name the major parts of a jointer and the functions of each.
12.5	Given a jointer and the necessary stock, the learner will set-up and demonstrate the following operations at 100% accuracy observing all safety rules a. smoothing edge b. making glue joint (edge) c. making edge bevel d. straighten edge	12.5	Do the following on a Jointer: a. Smooth the edge b. Straighten the edge c. Make bevel edge
12.6	Given a drill press, drills, tools, and stock the learner will set-up and demonstrate the following with 100% accuracy observing all safety rules:' a. Drill 1/2" hole in 3/4" stock-1/2" deep b. Counter sink c. Counterbore	12.6	Set up the drill press and drill a size hole to 1/2" depth, counter sink hole for a flat head screw and counter Boxe for the fastener assigned to you.
12.7	Given a mortising machine, stock and dimensions the learner will set-up and cut the assigned mortise to 100% accuracy observing all safety rules.	12.7	Set up the mortising machine and mortise to size, depth and center of material the problem assigned to you.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 12.0 (cont'd) Power Tools

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
12.8	Given a band saw and the necessary stock, the learner will demonstrate the following with 100% accuracy: a. names of major parts b. change blades c. safety rules d. cut given curve within 1/16"	12.8	Name the major parts of the band saw, change blades state 3 safety rules for the ban d saw and cut the curve assigned you with 1/16".
12.9	Given the following portable electric power tools the learner will identify each, give the safety rules for each and demonstrate the correct use of each for at least one operation: a. Drill Motor b. Saber saw c. Router d. Hand electric circular saw e. Belt sander f. Vibrator sander	12.9	Identify each of the portable power tools assigned you, give 3 safety rules for each and demonstrate one use of each tool.

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 13.0 Wood Joints

The learner will set up the proper machines and make four given wood joints with given pieces of woods within 1/32 inch accuracy.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		13.0	Make the following four different joints with stock assigned to within 1/32" tolerance: a. Lap joint b. Mortise and tenon c. Butt d. Tongue and groove
13.1	Given samples of four wood joints or drawing of them, the learner will identify each correctly: a. lap joint b. Mortise and tenon c. Butt d. Tongue & Groove	13.1	Identify the 4 wood joints assigned you.
13.2	Given the names of 4 wood joints, the learner will state the steps to construct them in their proper order mentioning all tools and equipment used: a. Lap Joint b. Butt Joint c. Mortise & Tenon d. Tongue & Groove	13.2	Write a detailed plan of procedure to make each of the joints below stating the tools & equipment used in each step: a. Lap b. Butt c. Tongue & Groove d. Mortise & Tenon

COURSE CABINETMAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 14.0

Finishing & Finish Material

The student will list three (3) of four (4) materials used as a final Finish coat of meterial and list proceeding steps (In order) leading up to the application of a final coat of finish.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
		14.0	List at least three (3) materials used as a final Finish coat and preceeding steps (In Order) leading up to the Application.
14.1	The student will list three of the four materials used as a final finish coat of material.	14.1	List three materials used as a final coat of material.
14.2	The student, with 100% accuracy, will list preceeding steps leading up to application of final coat of material.	14.2	List preceeding steps leading up to application of final finish coat of material.
14.3	The student will, pre-finish and finish a given piece of material using proper sequence of steps.	14.3	Finish a given piece of material.

COURSE CABINET MAKING

TERMINAL PERFORMANCE OBJECTIVE NO. 15.0 — Cabinet project

The student will demonstrate his ability to apply knowledge and skills gained in the previous objectives of this course by planning, constructing, and finishing a given cabinet work project with an accuracy of 85% or better.

NO.	INTERMEDIATE PERFORMANCE OBJECTIVES	NO.	CRITERION MEASURES
15.1	The student will, with 100% accuracy make a detail drawing of a specified tool box.	15.1	Make detail drawing of tool box assigned you.
15.2	The student will, with 100% accuracy, list the steps (in order) necessary to completely construct the tool box listed in I.P.O. 14.1.	15.2	List the steps (in order) necessary to complete the given tool box.
15.3	The student will construct the tool box listed in I.P.O. 14.1 with 85% accuracy.	15.3	Construct tool box assigned.
15.4	The student will make a finishing schedule for applying a sprayed laquer finish to the tool box project with 85% accuracy,	15.4	Make a step by step finishing schedule for a laquer finish.
15.5	The student will prepare the tool box for and will apply the lacquer finish with 85% accuracy.	15.5	Prepare the tool box for and apply a lacquer finish.